

FIG. 1A  
Prior Art

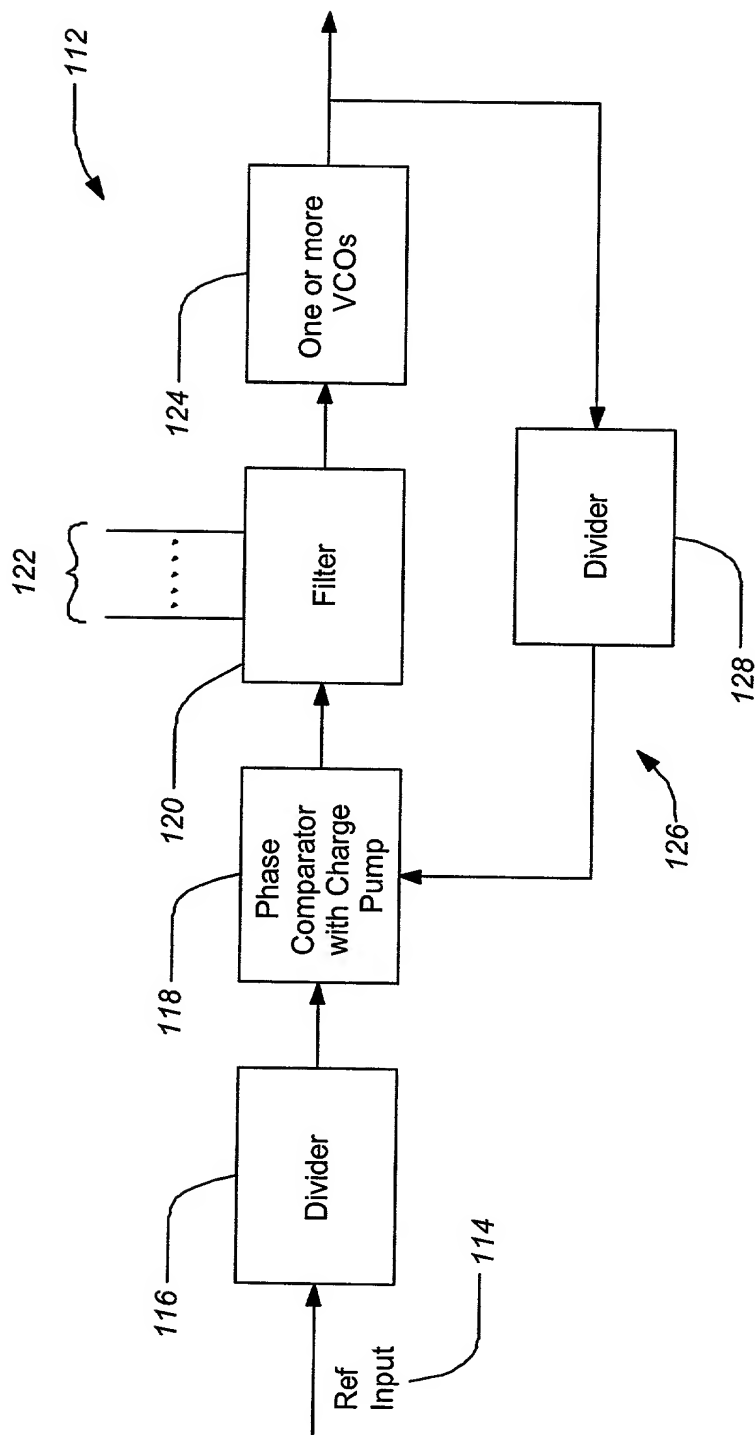


FIG. 1B

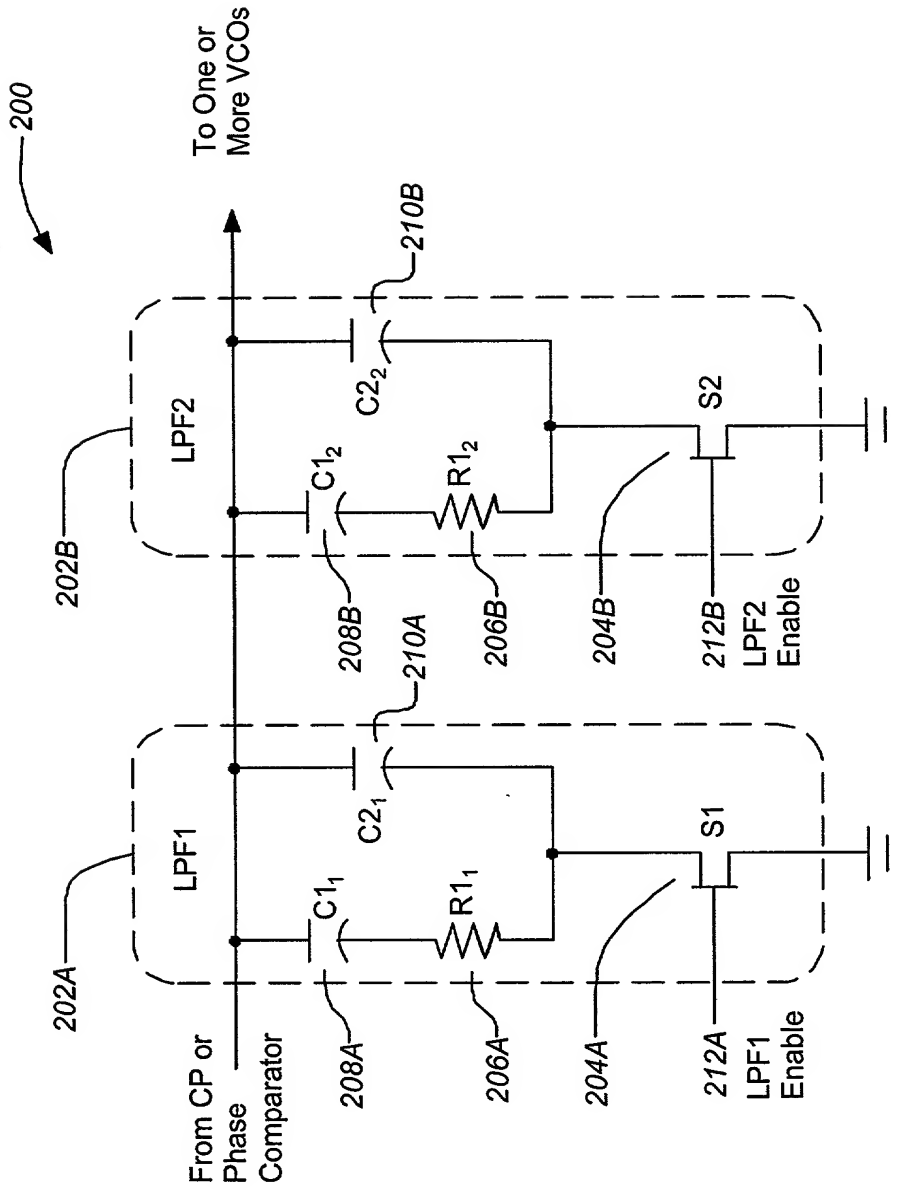


FIG. 2A

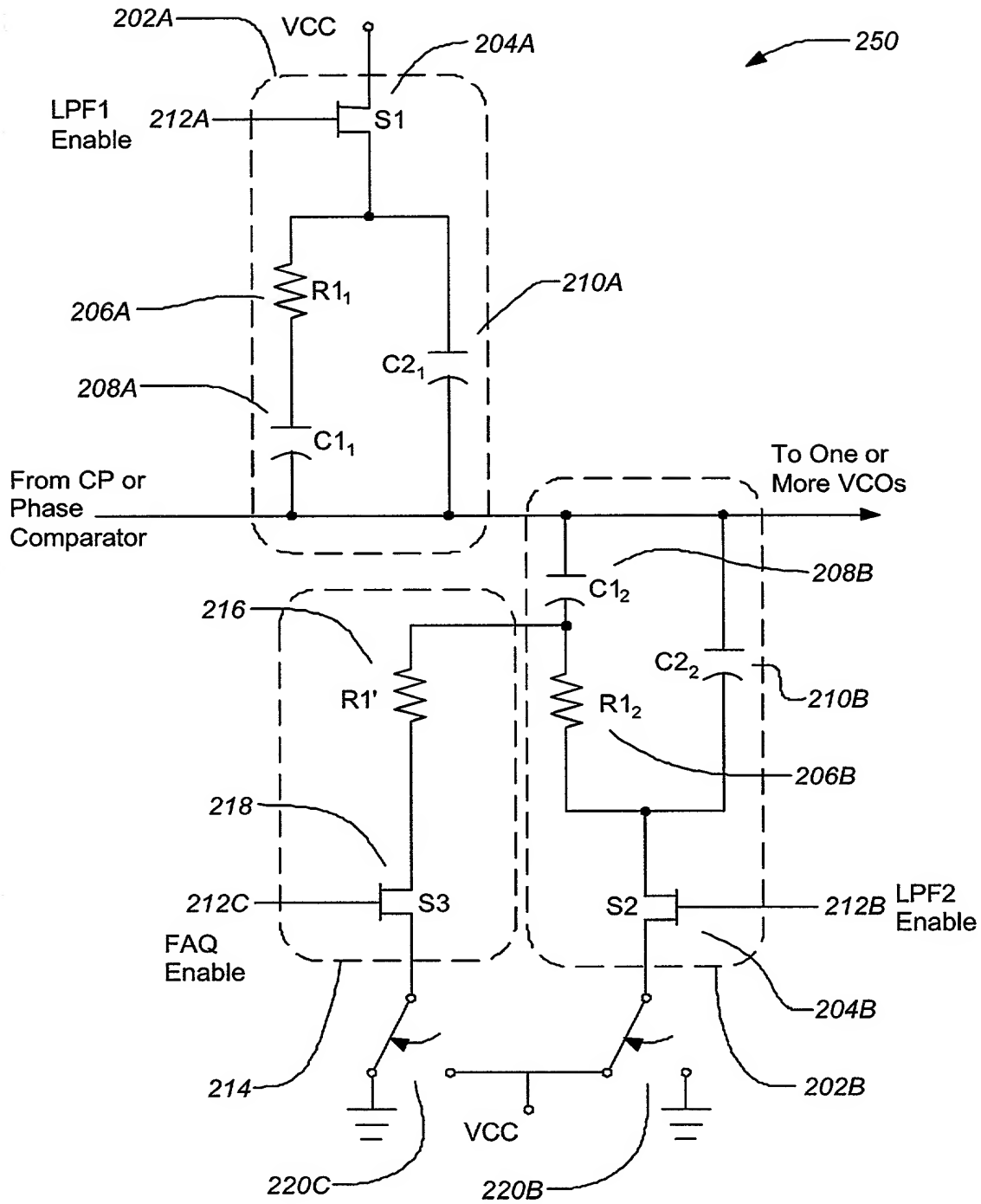


FIG. 2B

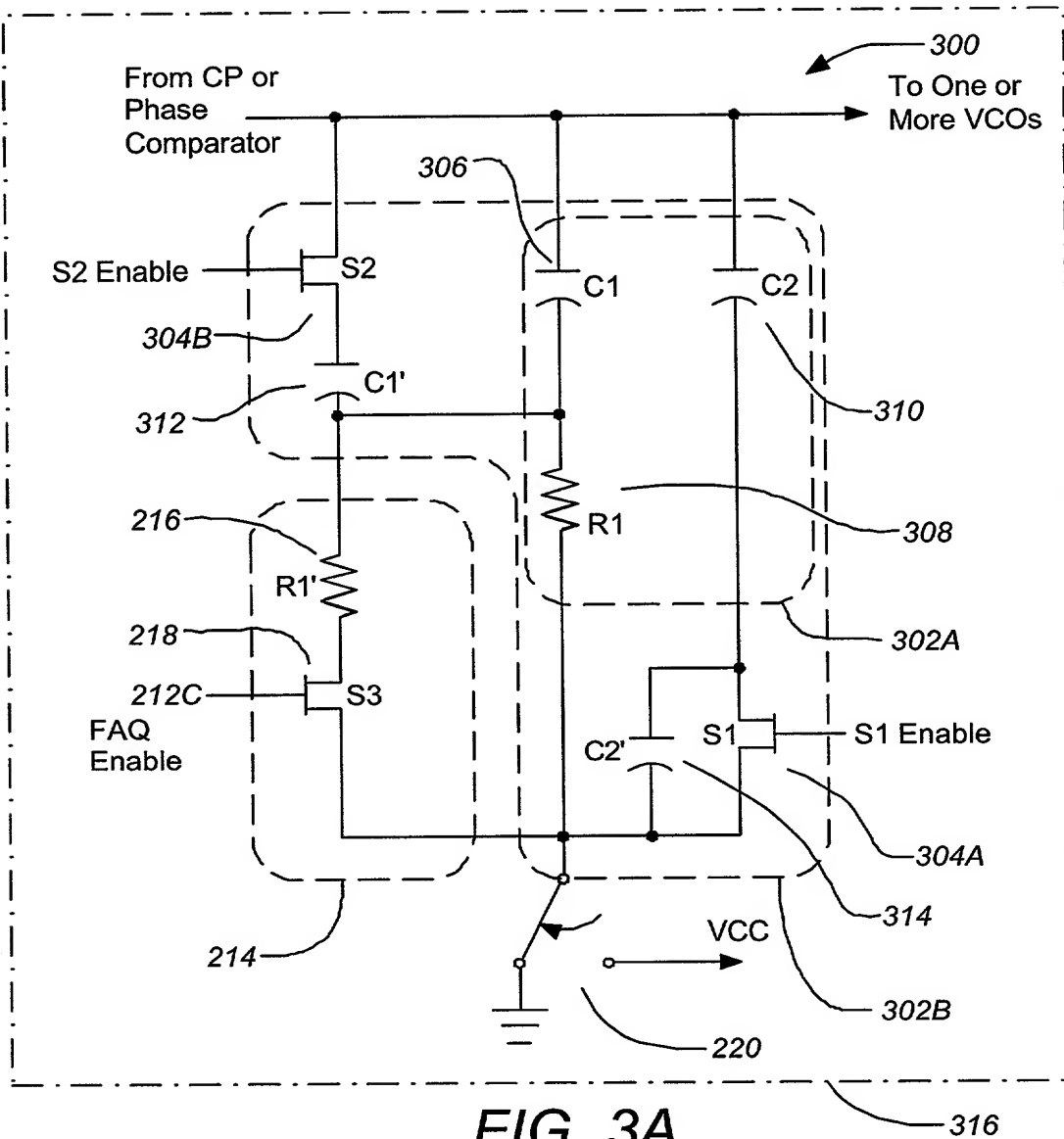


FIG. 3A

Loop Filter	S1	S2	S3	C1 (total)	C2 (total)	R1 (total)
LPF1 (BW1)	Closed	Open	Open	C1 only	C2 only	R1
LPF1 w/FAQ (BW1')	Closed	Open	Closed	C1 only	C2 only	$\frac{R1 \times R1'}{R1 + R1'}$
LPF2 (BW2)	Open	Closed	Open	C1 + C1'	$\frac{C2 \times C2'}{C2 + C2'}$	R1
LPF2 w/FAQ (BW2')	Open	Closed	Closed	C1 + C1'	$\frac{C2 \times C2'}{C2 + C2'}$	$\frac{R1 \times R1'}{R1 + R1'}$

FIG. 3B

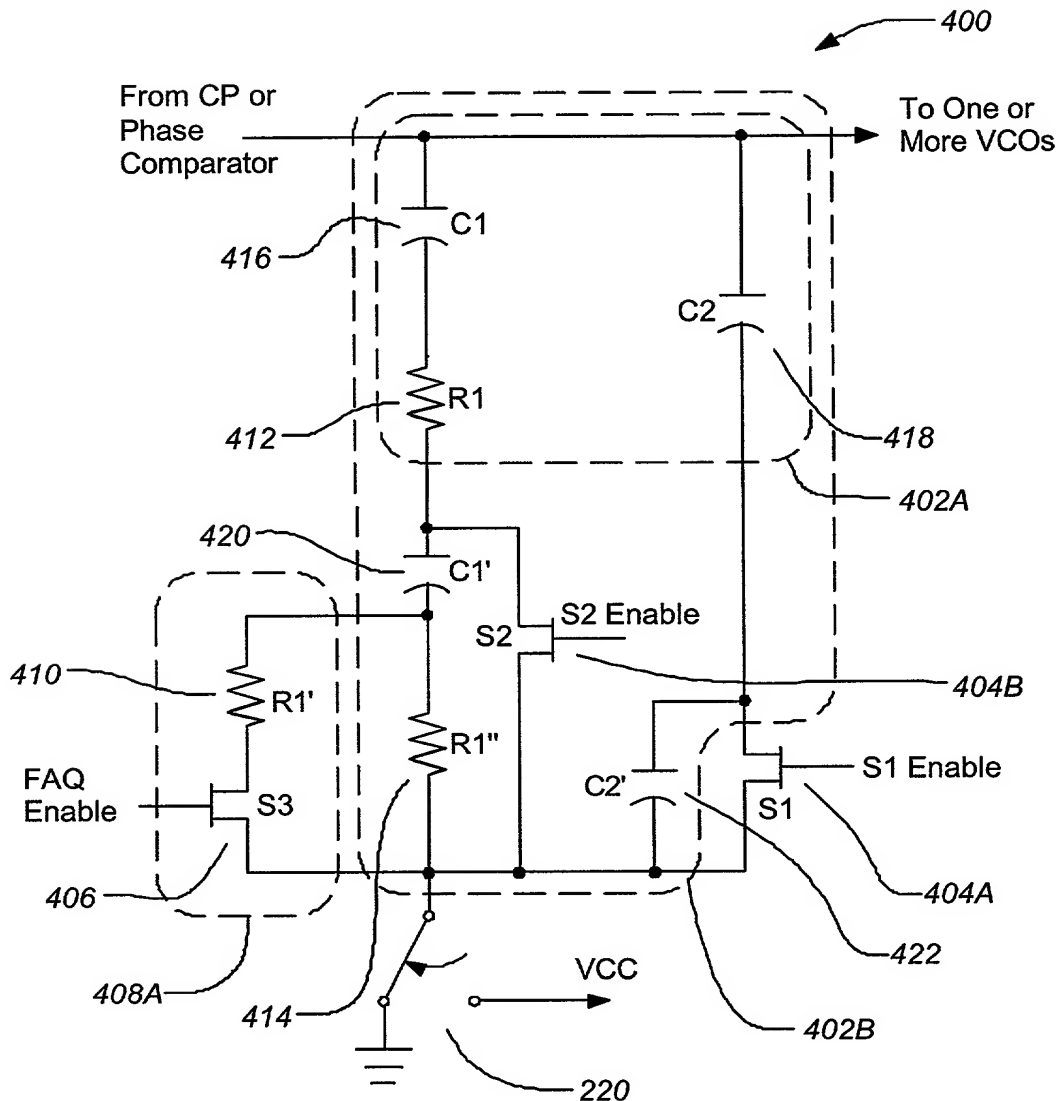


FIG. 4A

Loop Filter	S1	S2	S3	C1 (total)	C2 (total)	R1 (total)
LPF1 (BW1)	Closed	Closed	X	C1 only	C2 only	R1
LPF2 (BW2)	Open	Open	Open	$\frac{C1 \times C1'}{C1 + C1'}$	$\frac{C2 \times C2'}{C2 + C2'}$	$R1 + R1''$
LPF2 w/FAQ (BW2')	Open	Open	Closed	$\frac{C1 \times C1'}{C1 + C1'}$	$\frac{C2 \times C2'}{C2 + C2'}$	$R1 + \frac{R1' \times R1''}{R1' + R1''}$

FIG. 4B

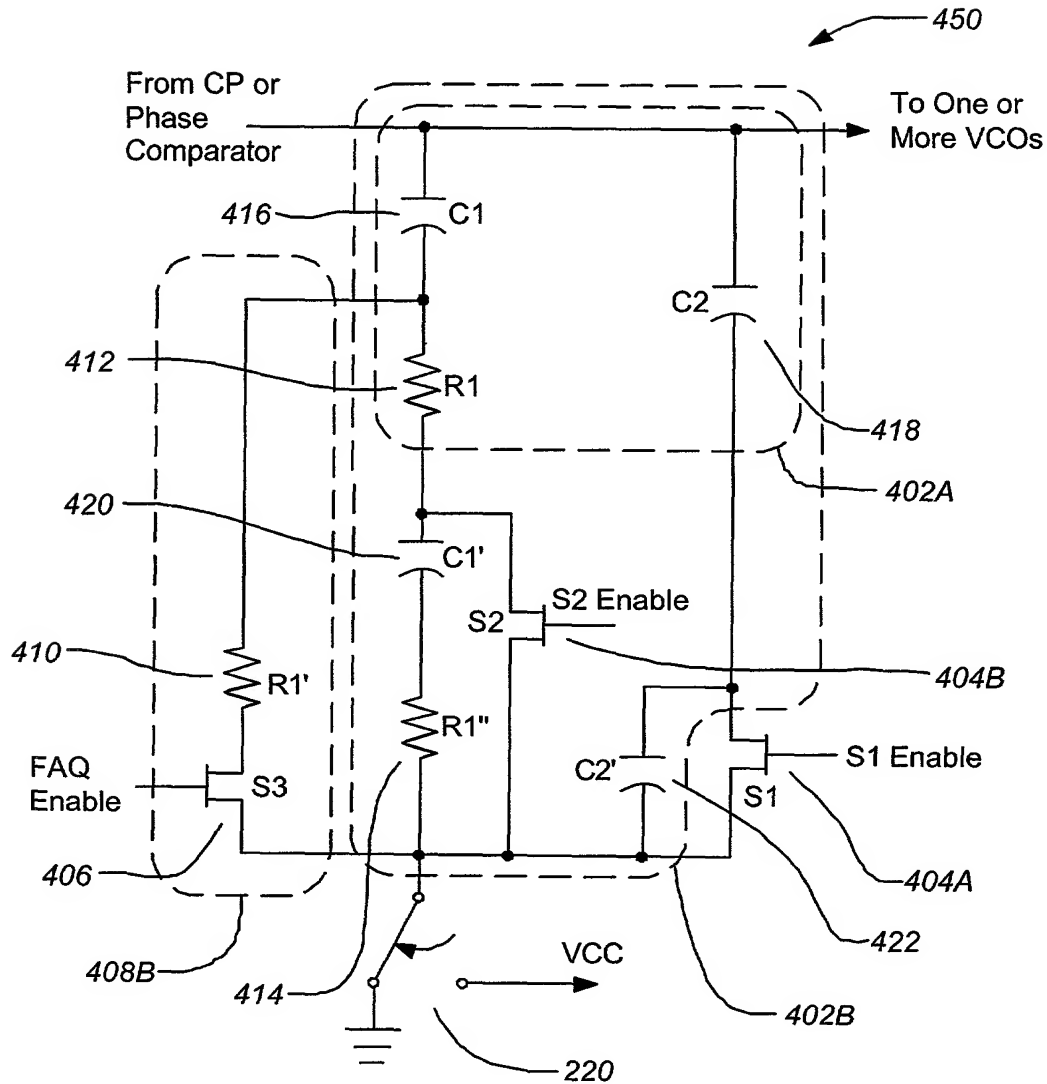
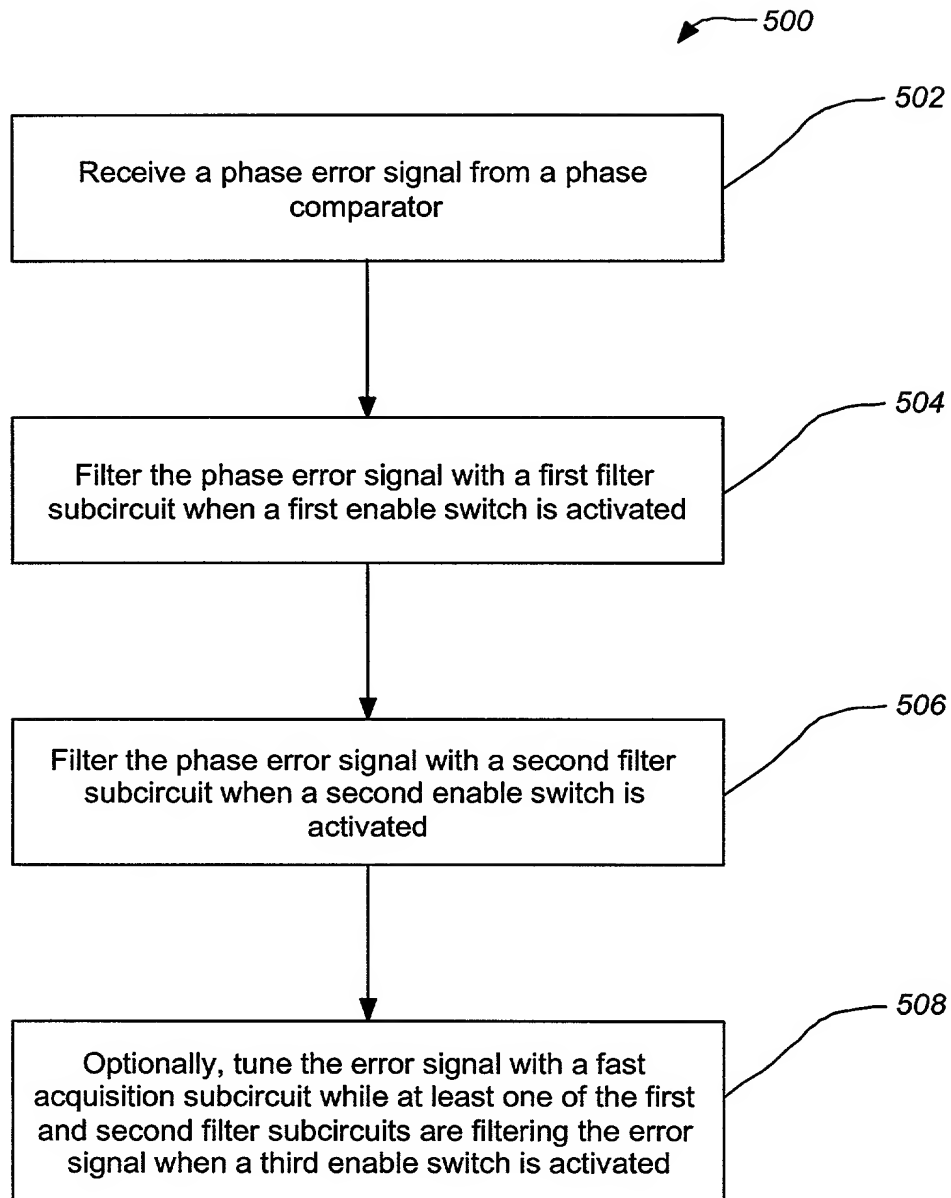


FIG. 4C

Loop Filter	S1	S2	S3	C1 (total)	C2 (total)	R1 (total)
LPF1 (BW1)	Closed	Closed	Open	C1 only	C2 only	R1
LPF1 w/FAQ (BW1')	Closed	Closed	Closed	C1 only	C2 only	$\frac{R1' \times R1}{R1 + R1'}$
LPF2 (BW2)	Open	Open	Open	$\frac{C1 \times C1'}{C1 + C1'}$	$\frac{C2 \times C2'}{C2 + C2'}$	R1+R1''
LPF2 w/FAQ (BW2')	Open	Open	Closed	$\frac{C1 \times C1'}{C1 + C1'}$	$\frac{C2 \times C2'}{C2 + C2'}$	$\frac{R1' \times (R1 + R1'')}{R1 + R1' + R1''}$

FIG. 4D



**FIG. 5**